



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,580	02/28/2006	Takao Goto	126781	7621
25944	7590	03/30/2009	EXAMINER	
OLIFF & BERRIDGE, PLC			CHEN, CHIA WEI A	
P.O. BOX 320850				
ALEXANDRIA, VA 22320-4850			ART UNIT	PAPER NUMBER
			2622	
			MAIL DATE	DELIVERY MODE
			03/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/569,580	GOTO ET AL.	
	Examiner	Art Unit	
	CHIA-WEI A. CHEN	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 January 2009.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 2 is/are allowed.

6) Claim(s) 1 and 3 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 2 is objected to because of the following informalities:

In the Amendment filed on 2 January 2009, in lines 13-25 of claim 2 (that is, page 4, lines 8-9):

“...wherein the **image taking block is provided** inside the first rotation means in such a manner that **the lid rotates** relative to the main body in response to rotation by the first rotation means **but does not rotate in response to rotation by the second rotation means...**”

It appears that the italicized portion “...but does not rotate in response to rotation by the second rotation means” may be a dangling modifier. The phrase could be interpreted in two distinct ways: 1) the image taking block does not rotate in response to rotation by the second rotation means, or 2) the lid rotates relative to the main body in response to rotation means but does not rotate in response to rotation by the second rotation means. The former interpretation is taken in the examination of this claim. In order to avoid potential confusion, appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata (US 2001/0004269) in view of Manchester (US 2004/0201595).

Claim 1, Shibata teaches, in Figs. 1-5, a portable terminal, comprising:

- first rotation means (axis 31) that supports a lid and a main body pivotally (paragraphs 0202-0203);
- image taking means (lens 33 for a digital camera) whose optical axis has the same orientation as the rotation axis of the first rotation means (paragraphs 0203-0204);
- display means (monitor 21), provided on the lid, for displaying images taken by the image taking means (paragraph 0217);
- second rotation means (axis 32) that supports the lid pivotally with respect to the main body about an axis perpendicular to the axis of the first rotation means (paragraph 0203); and
- detection means (sensor 55) that measures the rotation angle of the first rotation means (paragraph 0243-0247);

but is silent regarding:

- display control means that rotates the image taken by the image taking means according to the rotation angle measured by the detection means and displays the

image in the display means in such a manner that the up-and-down direction of an object in the image displayed by the display means coincides with the actual up-and-down direction of the object at a time when a direction perpendicular to a surface of the display means is the same as the direction of the optical axis.

Manchester teaches a display control means that rotates the image taken by the image taking means according to the rotation angle measured by the detection means and displays the image in the display means in such a manner that the up-and-down direction of an object in the image displayed by the display means coincides with the actual up-and-down direction of the object at a time when a direction perpendicular to a surface of the display means is the same as the direction of the optical axis (Orientation of the displayed image 14 is rotated such that the relative orientation between a viewer and the display image 14 remains approximately the same. Sensors 16 are used to determine the orientation of the display device 12 relative to gravity and/or the viewer.

See paragraphs 0025-0027 and 0021; Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the self-orienting display device of Manchester with the mobile phone display rotatable on two axes as disclosed by Shibata to improve the readability of images or text when the display device is turned or rotated. (See paragraph 0003 of Manchester.) Manchester also suggests the combination of the self-orienting display device and a mobile phone in paragraph 0020.

Claim 3, Shibata in view of Manchester teaches wherein a reference attitude is set as an attitude at which the direction perpendicular to the surface of the display means and the direction of the optical axis become the same direction, by rotation of the lid substantially ninety degrees about the rotation axis of the first rotation means and substantially ninety degrees about the rotation axis of the second rotation means relative to the main body, and wherein the display control means causes the image taken by the image taking means to be displayed as-is on the display means when in the reference attitude, and rotates the image taken by the image taking means and displays the image on the display means when not in the reference attitude.

Shibata teaches wherein the mobile phone is capable of being rotated in an orientation at which the direction perpendicular to the surface of the display means and the direction of the optical axis become the same direction, by rotation of the lid substantially ninety degrees about the rotation axis of the first rotation means and substantially ninety degrees about the rotation axis of the second rotation means relative to the main body (See Figs. 1 and 2).

Manchester teaches wherein the orientation of a displayed image 14 is rotated such that the relative orientation between a viewer and the display image 14 remains approximately the same. It is inherent that there is a "reference attitude" that coincides with the original "as-is" orientation of a captured image. When the display is oriented in the reference attitude, the captured image is displayed "as-is." When the display is in an orientation away from the reference attitude, the the display image 14 is oriented in

such a way that the relative orientation between a viewer and the display image 14 remains approximately the same (see paragraph 0025-0027, Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the self-orienting display device of Manchester with the mobile phone display rotatable on two axes as disclosed by Shibata to improve the readability of images or text when the display device is turned or rotated. (See paragraph 0003 of Manchester.) Manchester also suggests the combination of the self-orienting display device and a mobile phone in paragraph 0020.

Allowable Subject Matter

5. Claim 2 is allowed.
6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest:
a first rotation means that supports a lid and a main body pivotally;
second rotation means that supports the lid pivotally with respect to the main body about an axis perpendicular to the rotation axis of the first rotation means,
wherein the image taking block is provided inside the first rotation means in such a manner that the lid rotates relative to the main body in response to rotation by the first rotation means but does not rotate in response to rotation by the second rotation means, and

wherein the image taking element rotates along with the image taking block, by rotation of the image taking block, in such a manner that a longitudinal direction of the image taking element becomes parallel to a longitudinal direction of the display means when a direction perpendicular to a surface of the display means is the same as the direction of the optical axis, used in combination with all of the other limits of claim 2.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-WEI A. CHEN whose telephone number is (571)270-1707. The examiner can normally be reached on Monday - Friday, 7:30 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan V Ho/
Primary Examiner, Art Unit 2622

/C. A. C./
Examiner, Art Unit 2622